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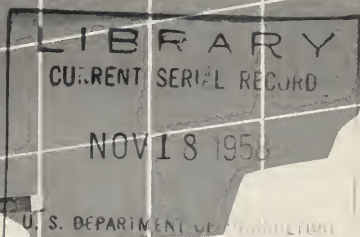
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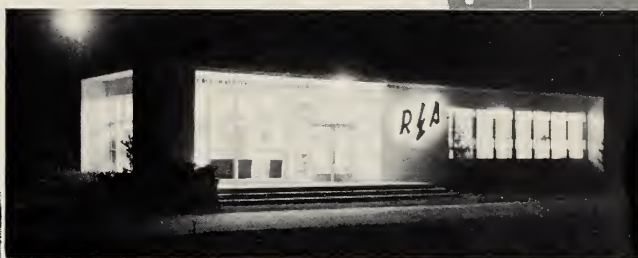
Rural Lines

RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

NOVEMBER
1958



ACROSS THE NATION— RURAL UTILITIES GAIN IN STRENGTH





A Message from the

ADMINISTRATOR

IF we are going to make sound and intelligent plans for the future of rural electrification and telephony, we need to know exactly where we stand today. Future probabilities and possibilities all depend on how we are doing at present. We need to know the condition of our physical plant, what our potential market is, and how we are faring financially at the moment. In short, we need to take inventory before we make future plans.

REA takes perpetual inventory of itself and of its borrowers and publishes the results each year in a statistical report. It is complete and accurate. But a statistical report, by its very nature, is undramatic and dry as dust.

This issue of **RURAL LINES** has been prepared to show you the big picture without bogging you down with statistics. On the electric side, the story of one typical co-op is told, to give the picture perspective. It is an interesting story, and one that is full of promise, for it tells of sustained progress despite temporary setbacks, of steady achievement despite obstacles. The record described in these pages is one in which all men and women who have helped to make a success of rural electrification and telephony can find reason enough for pride today and a genuine hope for an even brighter future.

Rural Lines

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Administrator.

Editor: Hubert Kelley, Jr. This month's contributor: Jack Howard.

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HEALTHY AND GROWING, THE TYPICAL ELECTRIC BORROWER IS GOING ON 21

YOU'D probably notice the headquarters of the Rosecrans County Rural Electric Cooperative if you happened to pass it while driving across the country. The headquarters building is smart and sharp, with modern architecture and landscaped grounds. The sign on the front proclaims that it is a home-grown enterprise.

It wouldn't occur to you that you are looking at the most typical of the 948 rural electric dis-

tribution systems which are financed by REA. It is too typical; you passed several other such headquarters along the highway. Rural electric systems seem to be everywhere out in the corn country where Rosecrans County is located.

This system runs east and west to opposite borders of Rosecrans County. The co-op serves all of the rural area of Rosecrans County, takes in a big piece of Hamlin County on the north and a sliver

Who is REA's Typical Borrower?

THE story of REA's typical borrower is based on the experience of a real borrower. The names of people and places, like Rosecrans County, are fictitious. They have been changed to permit a more objective appraisal of the co-op's past, present, and future.

The "typical" system was selected because, of all REA's 948 active distribution borrowers, its vital statistics come closest to the national average for all borrowers. It serves an average number of consumers, has an average number of miles of line, its net margin and net worth are average.

Many of REA's electric borrowers are far from typical. Co-ops range in size from the big 27,000-member Southwest Louisiana Electric Membership Corp., in LaFayette, to the tiny 23-member Littlefield Electric Cooperative, at Littlefield, Ariz. Some have seen acres of farmland subdivided into housing projects; others have yet to see their first suburbanite. Despite these differences, however, the management of most rural utilities will find that the story of REA's typical borrower has a familiar ring to it, for much of its experience is really the history of the whole rural electrification program.

of Hooker County on the south. The three counties consist mostly of flat farm land, on which corn and other crops form a vast checkerboard. It was originally prairie, with no rock or woodland to prevent the land being farmed right up to the straight fence-rows along the section-line roads. Underneath the black soil is limestone, and under that several veins of bituminous coal and pools of oil. The limestone and coal both outcrop in the yellow clay bluffs along the Big Mahaska River, which borders all three counties. There are quarries and mines along the river bluffs, and several out on the farms. Dericks of the four oil fields are scattered through the cornfields.

Rosecrans County is losing rather than gaining population. Its population was 25,000 in 1940. Today, it is barely above 23,000, of which almost 14,000 are rural people. The county's 1,900 farms are increasing in size. They average 195 acres nowadays. Last year they produced \$10 million worth of field crops, \$6 million worth of livestock, and \$542,000 in dairy products. Small wonder that Main Street in Stanton City is busy and bustling.

THE county seat isn't growing much however. It has remained at 9,000 population, more or less, for the past two decades. St. Francis, a manufacturing city of 65,000 across the river has better transportation and other facilities to attract industry.

The little unincorporated villages around the mines and oil fields are not growing, either. Strip mining is more profitable now than deep shaft mining, and

as long as coal is readily available underneath poorer land, it doesn't pay to tear up high-priced silty loam.

ONE factor affects population changes in the county. The loss in farm population is somewhat offset by suburban growth from St. Francis. The clay bluffs across the river from the city are proving to be attractive as home sites. About 50 new houses a year are being built on the Rosecrans County side.

While this prosperous farm area has been losing population during the past 20 years, the Rosecrans County co-op has grown rapidly. It now has more than 3,700 consumers, most of which it lists as farmers. The co-op's loan estimates are for 4,300 rural consumers and 1,330 miles of line. Already, 1,300 miles are built.

Last year, each Rosecrans consumer used an average 299 kilowatt hours of electricity each month, and farm consumers used 296. Both figures have more than doubled since 1949.

By any standard, Rosecrans County Rural Electric is a prosperous enterprise, as are most REA borrowers. Rosecrans is close to the average in other respects. It has been advanced \$2.5 million of the \$2.9 million in loan funds approved by REA. The co-op has repaid close to \$440,000 on principal, paid \$315,000 in interest, and built a credit cushion of \$50,000 in advance payments. It has more than a half million dollars in investments and special funds, including a fund for renewal and replacement. The

co-op has a net worth of more than \$400,000, better than 15 percent of its total assets. Last year's net margin was \$50,000, which was about 12 percent of operating revenue.

IN some ways it is not typical. The county is so overwhelmingly agricultural that it isn't apt to grow. And the co-op hasn't been promotion-minded until recently; it has never had a power use advisor.

The Rosecrans co-op's history is marked by the conservatism of its managers and boards of directors. Most of the organizers had had experience with live stock producers' cooperatives. Such men, active in farm organizations, have dominated the board.

The two managers who served until 1954 were former linemen with local utility companies. Their long suit was building lines. Both of them disliked paperwork and public relations. In spite of that, membership grew by leaps and bounds, along with net margins. When Manager Carl Huber left, co-op directors hoped Ernie Soderstrom would like bookkeeping better. He didn't. They hired a full-time office manager for the growing business. Tom Bidle, the present manager, is a graduate electrical engineer, with a sense of promotion and a liking for modern management methods. He has big plans for the future.

The spadework for the Rosecrans co-op began in 1937 with a mass meeting at the courthouse in Stanton City. About 400 farmers showed up and voted to get under way. There were 2,400 farms in the county then, averaging just less than a quarter section. Less than 5 percent had central station electric service, and 7

percent their own light plants. Some 30 percent had running water. Three-fourths had telephones and automobiles.

THE county agent and local radio station helped sign up 590 members, enough to apply for an REA loan of \$285,000. It would build 280 miles of line to serve 800 consumers. Midland Utilities would furnish power at 1.21¢ per kwh. At an average consumer use of 100 kwh on a minimum bill of \$3.50 per 40 kwh, it was estimated that the co-op should gross revenues of \$50,000 a year, with net margins of \$4,000. The loan was approved.

If any of the first board members had qualms about the risks involved in borrowing that much money, he would have been astonished at Rosecrans Electric's subsequent 15 loans from REA, each of them, on the basis of performance, more feasible than the one preceding.

The "B" loan boosted the allotment to \$570,000 to build 575 miles of line to serve 1,600 consumers. This was in 1941. In 1940 revenues were already \$100,000, netting the co-op \$17,000. REA helped the co-op get an allotment for materials when war was just around the corner. It helped finish work on the "A" portion but the "B" portion had to wait until the war ended.

Later loans covered the new headquarters and deficiencies resulting from constantly rising costs. System improvements — substations, tie lines, and general heavying-up — were necessary, too.

LOOKING back, now that Rosecrans' lines are about finished and the area saturated, several

things are apparent. Revenue per mile and net margins have climbed steadily upward with increased consumption. Meanwhile, maintenance costs have run low, and continue to do so. It is currently .37 percent of plant investment. Midland's price on power is down now to .83 cents. Line loss, which once ran as high as 25 percent, has gone down steadily to 10 percent. Even with a rapid increase in investment, the net worth ratio of the Rosecrans co-op has moved steadily upward.

The plant is one of the co-op's best assets for the future, in the opinion of Manager Tom Bidle. Built well, it should need a minimum of maintenance and new investment.

The population may shrink still more. Rosecrans County is a cash grain area. A quarter section farmer can lease two more sections nowadays and operate the whole with one hired man. This means idle services, since there will be empty farmhouses. Corn cribs and machine sheds do not require electricity.

New sources of revenue in sight are the new suburban houses on the river bluffs. Bidle counts heavily on these and on a new house-heating promotion program he is plugging. At the current rate of building, Bidle figures he may be able to serve 450 to 500 new suburban homes with house heating loads, as well as an estimated 350 new replacement homes which will be built elsewhere in the co-op's area, by 1975. So far, he has only seven complete house-heating loads, and he is contracting for a dozen more. No one load so far has been served through a full season. Bidle's estimates are based on

standard estimates, with 25,000 kilowatt hours used during the average year.

BIDLE also figures on increasing his large power loads. The limestone operations may go "all-electric" within the next ten years. One or more of the oil-fields may soon reach the stage where water-flooding operations will be needed to bring the oil up to pumping level, which means pumping revenues.

The manager also feels sure that farm usage will increase, even though farms decrease. Dairy and livestock farms are already using more equipment needing electricity. Since the area depends chiefly on cash grain, he expects corn-drying equipment and irrigation to increase. So far, this market is far from saturated.

Bidle believes that Rosecrans consumers will use more than 800 kilowatt hours a month by 1975. He counts on general increased usage besides the loads already mentioned.

He realizes the goal will not be easy to attain. It will take good management. It will take a lot of selling based on a continuing strong, aggressive promotion program.

If the number of consumers now on the books should merely break even, this cooperative would be in good shape. Maintenance costs are low, and thanks to a good plant soundly built, there is no reason why they should rise greatly.

If power consumption increases, as Tom Bidle expects it to do with a strong promotion program, the Rosecrans County Rural Electric Cooperative can look forward to a prosperous future.

THE NATIONAL PICTURE:

REA Electric Borrowers Are Strong and Prosperous

AS 1958 began, 1,030 rural electric systems financed by REA had been energized. They were in operation in 46 States, Alaska, Puerto Rico, and the Virgin Islands, distributing electricity to 4,466,444 consumers over 1,405,327 miles of line.

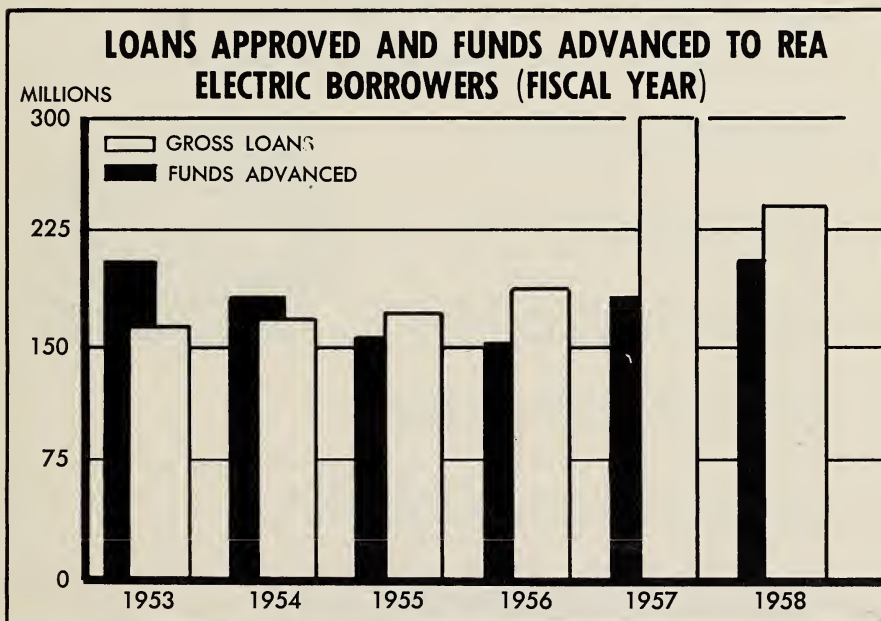
Some already had paid off their loans; remaining were 948 active borrowers engaged primarily in operating distribution systems, while 32 operated generation and transmission facilities exclusively.

From practically any angle, these systems are financially sound, with good prospects for growth. Graph almost any phase of their economic history, and the curve climbs steeply. Revenues and net increase, the number of consumers goes up. The rural electrification story is a success story if ever there was one.

Growth is reflected by higher loan levels

When the electrification program got started 23 years ago, there were some who thought that REA would make only one loan to each borrower. The rural utility would use the money to string lines to the farmers in its area, pay off REA, and that would be the end of the loan program.

Through the years, however, the loan trend has been up, not down. One loan was made to a borrower, then another, and then still another, as additional areas were served and loads increased. Rural utilities, it turned out, are part of a dynamic, growing in-



dustry with continuing needs for new funds.

Between July 1, 1956, and June 30, 1958, REA approved loans totaling \$542 million to rural electric systems. That is more than REA lent during its first 10 years of activity. During the same 2-year period, REA advanced \$391.5 million to its borrowers. When the program began, it took more than 9 years to advance that much money.

Consumers are using more kwh than ever

A number of early day prophets thought that farmers, once they received central station electric service, would be content with a few light bulbs, refrigerators, radios, and washing machines. What a prophecy that turned out to be!

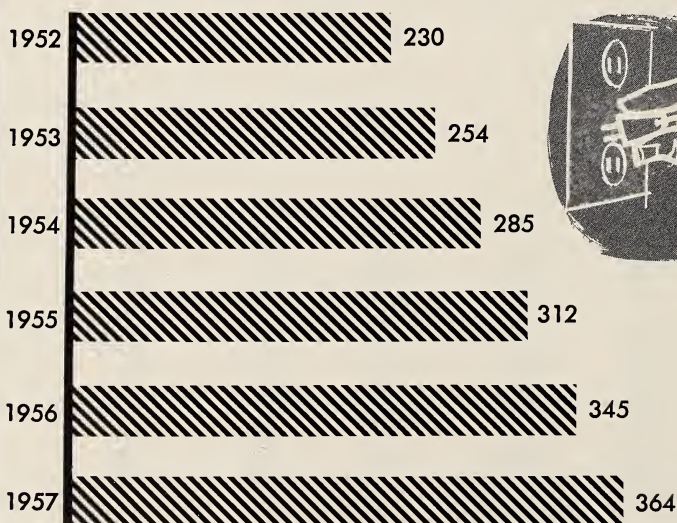
Both farm and non-farm consumers on REA-borrower lines

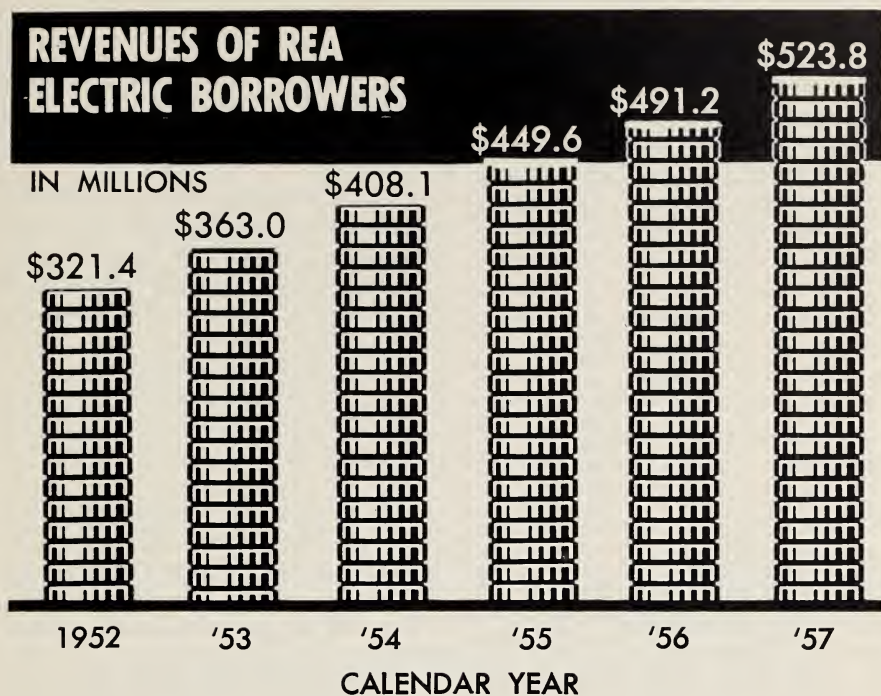
So far, REA has approved more than \$3.8 billion in electrification loans.

About 77 percent of the loans approved has been for electric distribution facilities. Some 22 percent has been for construction of G & T facilities, and 1 percent has been made for financing farmstead installation of wiring, plumbing, electric equipment, and irrigation facilities.

have been buying electricity in ever-increasing amounts, month after month, year after year, since the program began. Total consumption has been doubling about every 7 years. Surveys indicate that for every dollar invested in rural power facilities, the farmer invests 3 to 4 dollars in wiring, plumbing, and electric appliances.

AVERAGE MONTHLY KWH CONSUMPTION BY CONSUMERS ON REA DISTRIBUTION BORROWERS LINES





Borrowers' revenues keep rising

As sales go up, operating revenues go up, too. During 1957, total revenues reported by 959 electric borrowers reached a new high of about \$523.8 million—an increase of more than \$200 million since 1952.

Each year, a smaller share of this revenue is being contributed by farm power users. In 1952, 62 cents of every revenue dollar was paid in by farm consumers. In 1957, however, farmers were accounting for only 51 cents of each revenue dollar.

Non-farm residential consumers, on the other hand, were contributing only 20 cents to each dollar received in 1952. Five years later, their contribution had risen to 27 cents.

Commercial and small indus-

trial users paid 10 cents per dollar of revenue in 1952; they paid 11 cents in 1957. And large industrial power users—over 25 kva—upped their share of the revenue dollar from 4 cents in 1952 to 7 cents in 1957.

The share of the dollar contributed by all other power users has stayed the same, about 4 cents.

There have been significant changes where the revenue goes, too. In 1952, 20 cents went for depreciation; in 1957, only 17 cents. In 1952, 10 cents went for interest; last year, only 8 cents. Since other expenses have stayed roughly the same on a per dollar basis, borrowers were able to increase their net margins from an average of 8 cents per dollar in 1952 to about 12 cents per dollar last year.

Time may aid low-revenue borrowers

Averages tell part of the financial story of REA electric borrowers, but they cannot tell it all. The condition of a number of systems is much better than average; the condition of others is below average.

In 1957, 54 borrowers reported deficits in their net margins.

This appears to be a temporary condition; it is far from incurable. For some borrowers, retail rate revisions will be the answer. Others require better financial planning. And there is evidence that time will help to cure the financial difficulties of many of them.

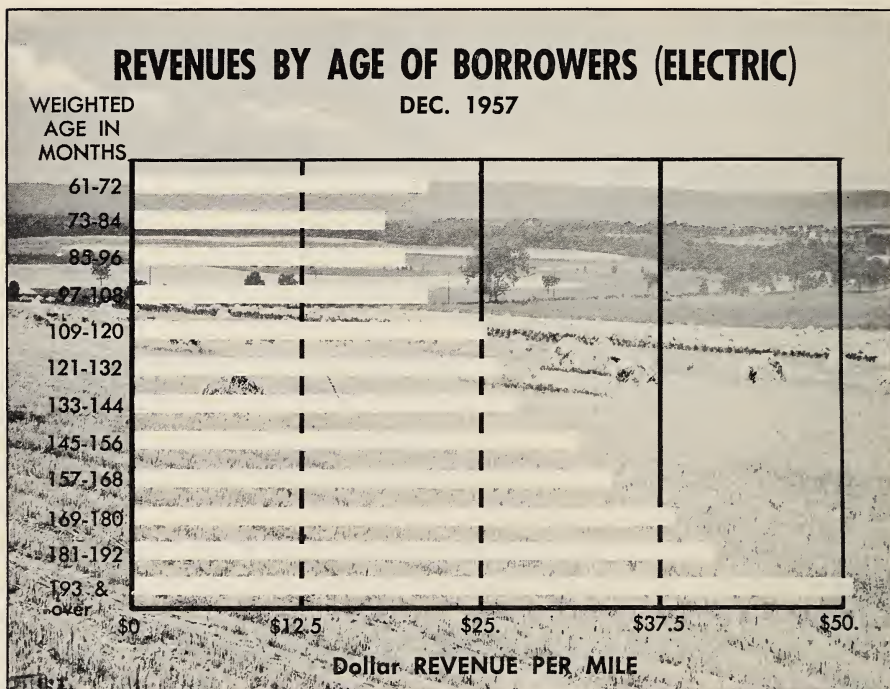
As the table below shows, it is almost axiomatic that the older the borrower, the greater the per

mile revenue. There are two explanations for this gradual increase:

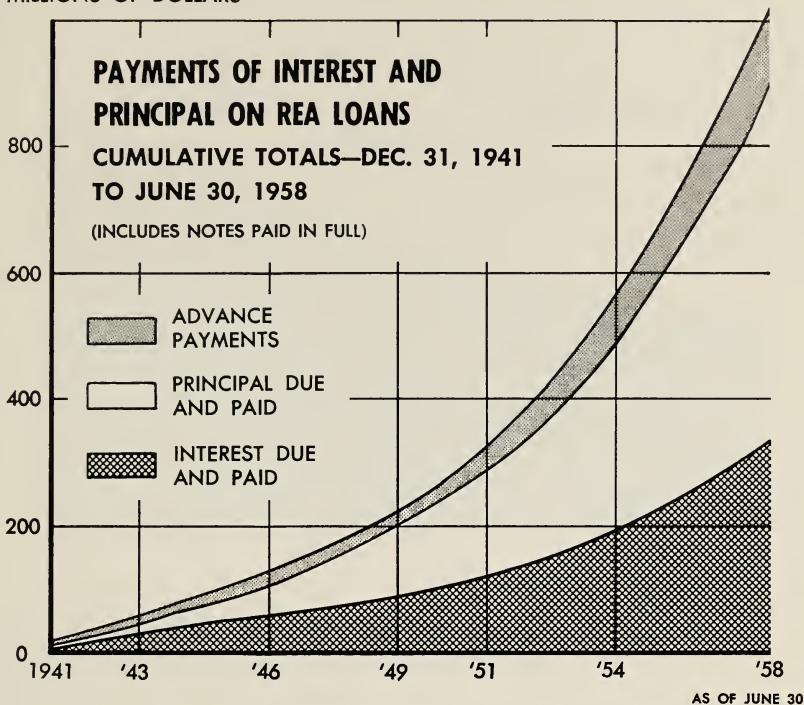
(1) Once electricity is made available to an area, it takes time for people to add the equipment and appliances that consume kilowatt hours. But they add them eventually.

(2) In the long run, more consumers are added to each mile of line.

Once a rural electric system has achieved area coverage, it usually costs it less to serve a new consumer who is added to its lines. Most new consumers today can be served with no more investment than it takes to build a small line extension or to install a service drop.



MILLIONS OF DOLLARS



Borrowers make their loan payments—and more

By the standards of any financial institution, the repayment record of REA's electric borrowers is excellent.

As of June 30, 1958, they paid more than \$1 billion to the Federal Government. This total included \$545,970,000 paid on the principal of their loan obligations, \$327,959,000 in interest, and \$128,652,000 paid in advance of due dates. The advance payment figure rose more than \$20 million during the last fiscal year.

The graph below illustrates the rapid acceleration in payments which has taken place since about 1950. It is not a straight-line graph, but an ascending curve—

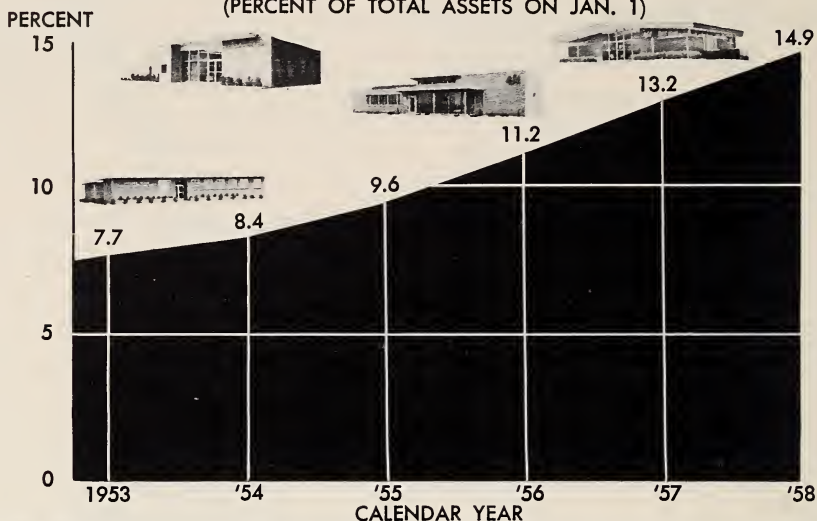
one which is rising more sharply each year.

At the same time that borrowers' chalked up this repayment record, the number of systems delinquent more than 30 days in payment of principal and interest dropped to an all-time low of four. In 1947, there were 84 delinquent borrowers.

REA's foreclosure record is also good news. From the beginning of the program to date—a period in which REA advanced more than \$3 billion to rural electric systems—losses to the Government on foreclosures have amounted to only \$44,478. This loss was experienced on loans to two borrowers.

NET WORTH OF ELECTRIC BORROWERS

(PERCENT OF TOTAL ASSETS ON JAN. 1)



Net worth climbs nearly two percent a year

Net worth is one of the most important indexes of the growing independence and financial strength of REA-financed electric systems.

It is defined as the equity owned by the members of a cooperative or the owners of a company, and it is obtained by subtracting total liabilities from total assets.

At the end of 1953, 960 REA electric borrowers reported a composite net worth of \$193 million, or 8.4 percent of their total assets. By the end of 1957, the composite net worth had increased to nearly \$437 million, or 14.9 percent of total assets.

As with the average revenue figure, average net worth fails to

tell the whole story. Forty-eight electric systems now have net worths of more than 50 percent; the net worth of three borrowers exceeds 90 percent. On the other hand, 130 borrowers currently have negative net worths. They owe more than they own.

Analysis of net worth statistics through the years holds forth hope for these lagging systems, however. Each year, a certain number of borrowers in every net worth category move up into higher categories. Several borrowers with negative net worths in 1957 will cross over to the plus side this year, and more will follow next year. Before many years pass, REA expects all its electric borrowers to be on the sunny side of the street.

The price of power keeps falling

The electricity supplied by rural electric utilities is one of the few things—if not the only thing—that costs the farmer less today than it did before World War II.

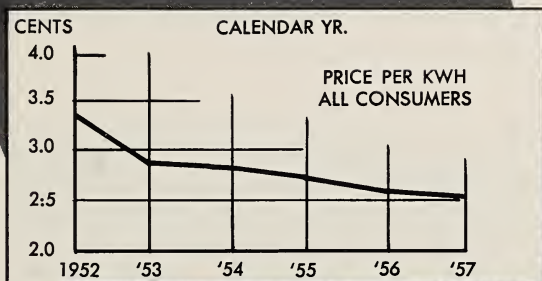
Year after year, all rural consumers have been paying a lower average price per kilowatt hour of electricity. Currently, the price is at a new low—about 2½ cents per kwh.

In part, this downward trend is evidence of careful management by REA electric borrowers. On the whole, managers have done an excellent job of keeping expenses at reasonable levels, despite rising costs.

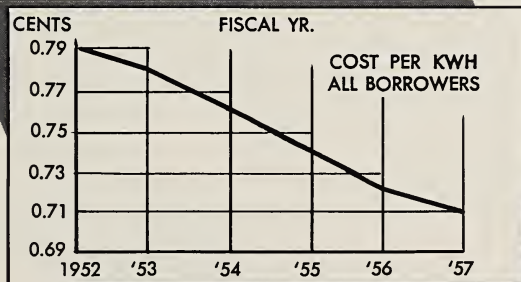
The decreasing price also reflects the greater number of kilowatt hours purchased by each consumer. Under a typical rate schedule, the more electricity you buy, the less you pay per kilowatt hour. Therefore, the increasing kwh consumption tends to keep the overall average price of electricity coming down.

The average cost of wholesale power keeps dropping, too, declining from about 7.9 mills per kwh in 1952 to 7.1 mills last year. Larger power purchases have contributed to this lowering price, as has a team approach by some borrowers in arranging for long-range purchase of power.

RETAIL PRICE OF POWER DOWN



WHOLESALE COST OF POWER DOWN



More G & T loans approved

The past few years have seen a sharp increase in the amount of generation and transmission loans approved by REA. From the beginning of the program up to 1953—a period of 17½ years—G & T loans were granted to provide 1,145,000 kilowatts of generating capacity. During the next 5 years and 5 months, loans were approved to provide another 945,000 kw of capacity.

In 1957, 76 borrowers generated a total of 3,291 million kwh, of which 2,800 million were generated by power-type borrowers. This energy accounted for approximately 15 percent of the total electric energy input of all electric borrowers during the year.

The 76 borrowers did the job with 150 generating plants with

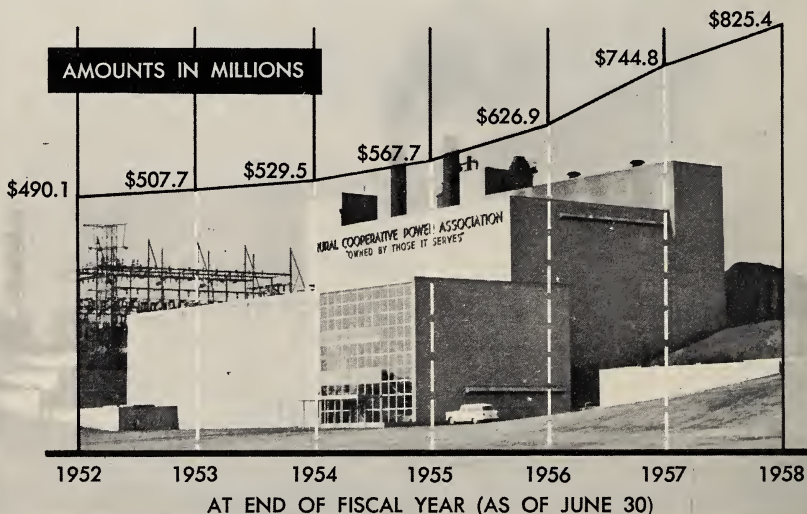
an overall nameplate generating capacity of 1,013,115 kw, of which 31 hydro plants had 44,569 kw, 95 internal combustion plants had 289,296 kw, and 24 steam plants had 679,250 kw.

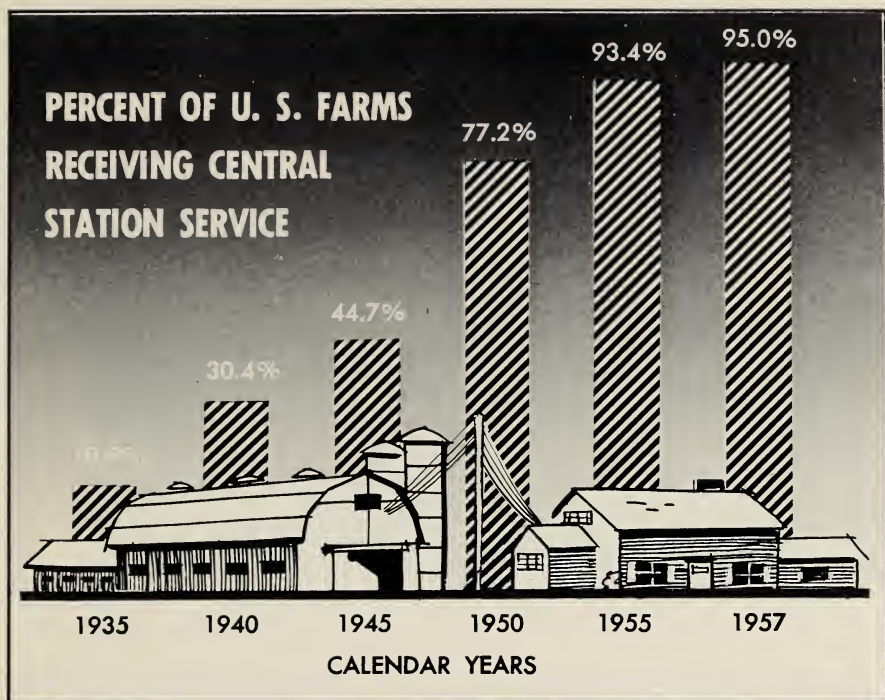
Power-type borrowers had 64 of these plants, with a combined generating capacity of 809,472 kw.

Since Jan. 1, 1958, still more plants have been built, raising total installed capacity today to an estimated 1,256,000 kw.

At the same time, REA and its borrowers have been giving more attention to arrangements for interconnection, for integration, for exchange of power, and for lease operation. Such arrangements help hold down cost and increase the dependability of the power supply.

GENERATION AND TRANSMISSION LOANS APPROVED TO REA BORROWERS (CUMULATIVE)





THE OUTLOOK:

Still more consumers—more kwh —and more plant

THE future of rural electrification can be summarized in three phrases: More people, increased consumption, heavier plant.

These trends seem certain to continue for at least 20 more years:

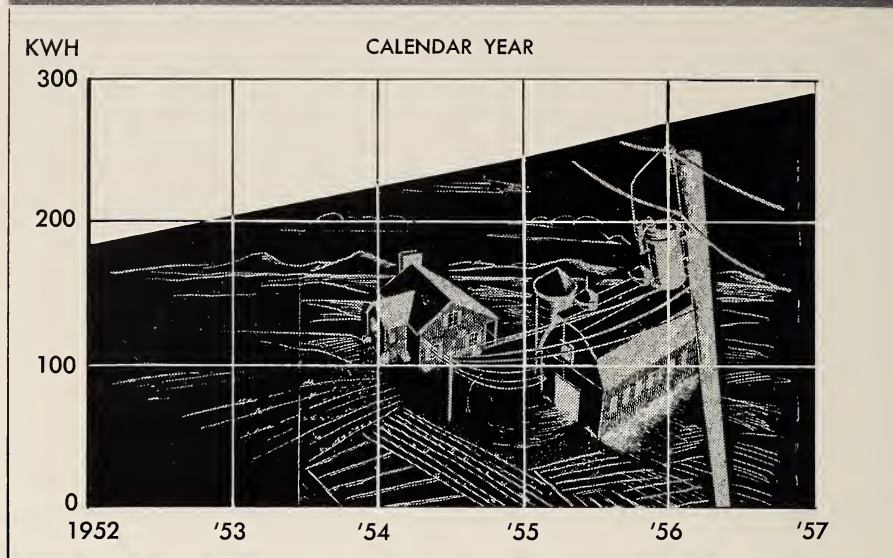
- More non-farm families will move into rural areas. Many will buy homes in new suburban housing developments. More retired people will buy country homes to escape the high living costs of the city. As highways are steadily

improved, more commuters will seek a rural environment for their families. And in many areas, the resort boom will continue.

- More businesses and industries will start operations in rural areas, or move there from towns and cities.

- The number of U.S. farms will diminish and families that give up farming will be reclassified as non-farm. Those farms that remain will use more electricity for farm chores.

AVERAGE MONTHLY CONSUMPTION OF POWER PER FARM



- Non-farm consumers, as well as farm, will heat more homes with electricity; year-round air conditioning may be as commonplace as refrigeration in 20 years.

- Rural power distributors will have to "heavy up" existing lines and substations to keep abreast of demand.

The first goal of the rural electrification program has been all but attained. In 1935, only one out of 10 farm homes had central station electric service. Today some 95 out of every 100 have it.

A little more than half of these farms get their electricity from REA-financed systems.

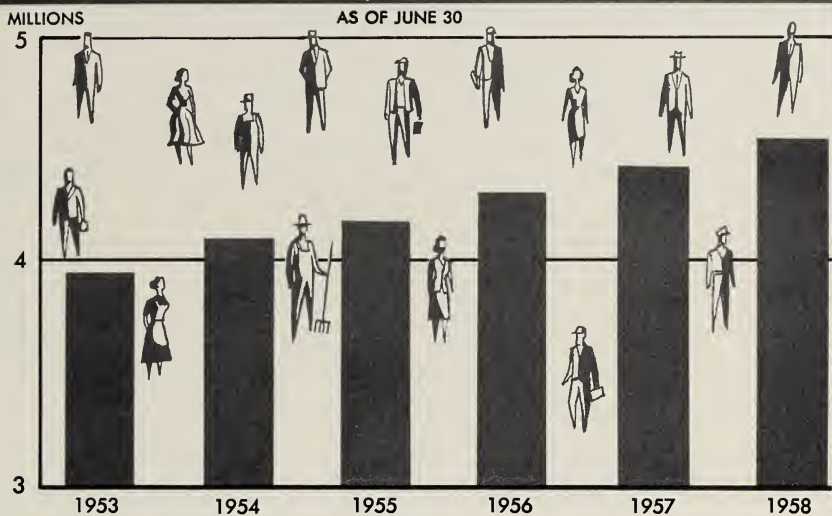
As borrowers approached their first objective, a second goal began to take shape. It is one which is not likely to change in the years ahead: To assure the availability of a constantly high quality of service to all rural consumers within a service area in whatever amounts they will use, at the lowest possible cost consistent with sound management of the cooperative.

Kwh usage per farm is up

In 1940, there were more than 6 million farms in the United States, according to the U.S. Bureau of the Census. By April, 1950, the number had declined to less than 5.4 million, and at the time of the last census, it had dropped still more to fewer than 4.8 million.

Despite this decline, the farms that remain use more kwh each year. Average monthly kwh consumption per farm in 1957 was 291, double the average of 1950. Some prosperous farm states had averages much higher than the national mean. Iowa, for instance, reported average farm kwh consumption of 455 a month

NUMBER OF CONSUMERS SERVED BY REA BORROWERS



in 1957; North Dakota had 376; Wisconsin had 456.

Bigger increases are ahead, as more farmers apply electricity to farm chores, like crop drying, stock feeding, barn cleaning, and milk cooling. Conservative fore-

casters predict that by the year 2000, each farm worker will use a minimum of 1700 kwh a month to help him with his chores.

Yet undiscovered applications of electricity could make this prediction far too low.

100,000 new consumers are being added every year

Each year, about 100,000 new consumers are being added to systems financed by REA. Three out of every four of these new members are not farmers; they are commuters to nearby cities or employees of local enterprises. A number of the new consumers, of course, are the firms themselves.

In some areas served by REA borrowers, like parts of Michigan and Minnesota, a large percentage of these new non-farm members have built resort homes, where they require electricity only during the summer and the hunting season.

Other new consumers in rural

areas are retired couples, weary of the city, who are realizing a long-time dream of settling down on an acre in the country.

There are indications that the number of non-farm consumers on REA-financed lines will increase in years to come. Millions of new families are being formed each year, and suburbs will continue to expand into farming areas to accommodate them. The nationwide highway program, now going into high gear, is expected to make commuting more attractive to many breadwinners.

The resort boom shows no signs of abating. People have longer

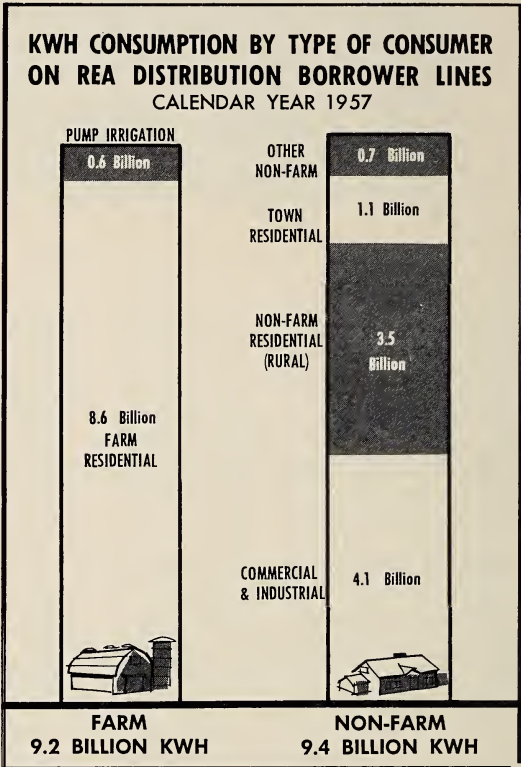
vacations today, and better roads roads will mean they can travel farther on weekends.

Finally, there will be a higher proportion of older people in our population in years ahead. Social security, insurance, and private pension funds will enable many of them to live comfortably in the country, where they can enjoy the modern conveniences of the

city while making their fixed incomes go farther.

All of these social trends add up to more non-farm consumers on REA electric borrowers' lines. They add up to higher revenues, too. If members continue to be added at present rates, borrowers will be serving about 5.5 million consumers by 1968; they will serve 6.5 million in 1978.

TODAY:
Non-farm consumers
buy more kwh than
farm consumers



Non-farm consumption is leading farm on REA borrowers' lines. In 1957, borrowers sold 9.4 billion kwh to non-farm consumers; farmers purchased 9.2 billion kwh.

Non-farm rural consumers have been described as "high in demands, low in patience." Many are accustomed to the reliability of town electric service, and they

expect the same quality of service in the country. They do not have to be sold on the advantages of hot and cold running water, but they will be impatient if they can't get their appliances repaired quickly and at reasonable cost.

In terms of number of consumers, rural electrification is still a farm program, but the non-farm

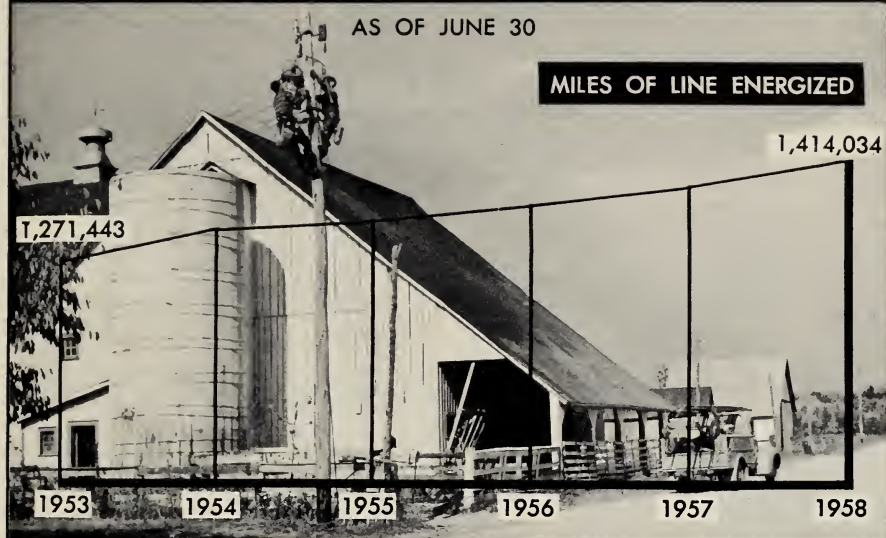
MILES OF LINE CONTINUE TO GROW

AS OF JUNE 30

MILES OF LINE ENERGIZED

1,414,034

1,271,443



consumers are catching up. Last year, borrowers served about 2.5 million farmers; they served an estimated 2 million non-farm families and commercial enterprises. Within 5 years, the number of non-farm consumers may edge ahead of farm.

REA borrowers have been busy keeping up with the increasing demand for electricity and for more reliable service. They are likely to be even busier in the future.

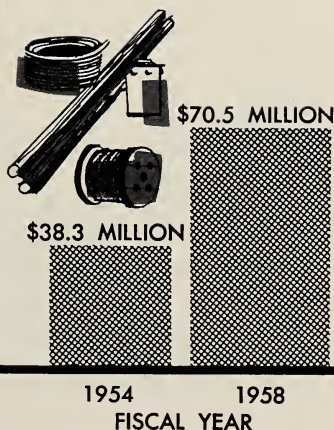
During the past 8 years, they have doubled the value of their total electric plant. The value topped \$3 billion at the end of 1957.

Part of this additional plant investment has gone into new lines. About 140,000 miles of new lines have been energized by borrowers during the past 5 years, bringing total mileage to 1,414,034 at the end of fiscal 1958.

But borrowers have been using more and more of their funds to "heavy up" existing lines and sub-

stations. During 1955, only 21.5 percent of the loans made to rural electric systems went for system improvements. By fiscal 1958, the share had risen to 29.2 percent, and the percentage is likely to rise every year from now on.

LOANS MADE FOR SYSTEM IMPROVEMENTS



Plant value may quadruple in two decades

If the present rate of plant investment continues, rural utilities financed by REA could have a total plant worth about \$12 billion in 1978.

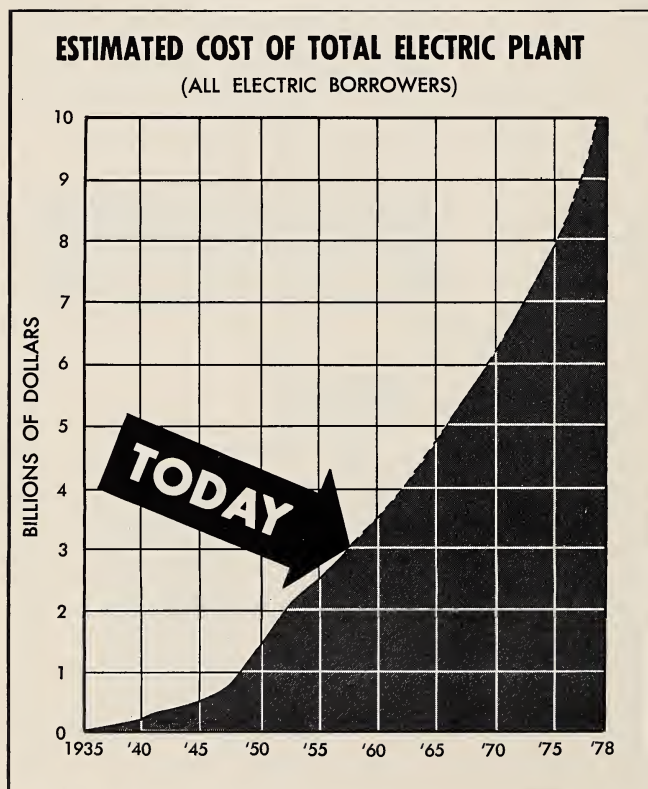
This estimate is based on predictions that plant will double in value every 10 years. Since value has already doubled once during the last 8 years, such a forecast does not seem unreasonable. A similar rate of increase is being experienced by a group of older private utilities.

Should the value of plant increase as predicted, borrowers may require new funds in 1978 totaling one billion dollars.

It is not inevitable that REA borrowers will grow in financial

strength and prosperity. The forecasts here represent a potential, nothing more. To realize that potential, rural electric systems must continue to streamline their management methods, to improve the quality of their service to consumers, to keep the price of power down, and to promote new applications of electricity in farm and home.

The borrower who sits back and waits for opportunity to fall in his lap may find that it passes him by. But the one that stays on his toes, and makes his own opportunities, may discover that his future is far brighter than the most optimistic forecast that REA can make today.

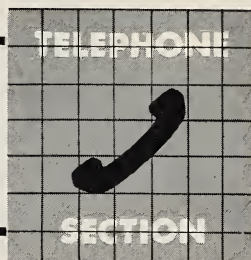


MORE RURAL PEOPLE TO GET BETTER TELEPHONE SERVICE THROUGH LOANS

Subscribers provided
for by loans

Fiscal Year	To Receive Initial Service	To Receive Improved Service	Route miles of line provided by loans
1953	38,916	33,857	21,679
1954	64,044	56,762	39,396
1955	53,180	60,066	34,194
1956	80,082	106,956	44,960
1957	62,766	111,886	42,558
1958	64,864	105,598	38,177

REA Telephone Program Gains Industrywide Acceptance



TODAY the REA telephone program is generally accepted by both the public and the industry. Borrowers are providing rural subscribers with modern dial service and are helping to complete the vitally important national communications network.

There was some skepticism in the beginning. When the telephone program started in 1949, many independents were in a bad way. Their equipment was worn-out and obsolete. They couldn't afford to replace it. The Doubting Thomases feared a duplication of the electric program, which built big, brand new cooperatives from scratch.

The telephone program was different. The principle was to help and encourage existing rural

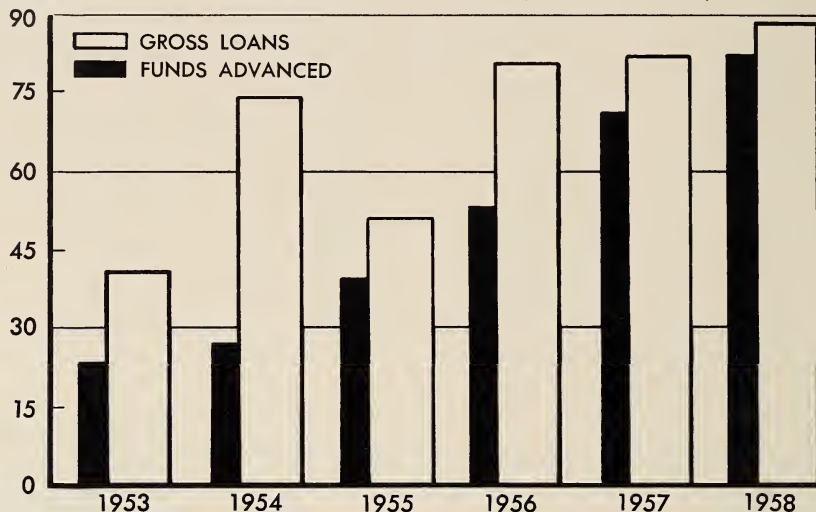
phone companies wherever possible — whether commercial companies, mutuals or co-ops.

In 1950, only 38.2 percent of American farmers had telephones and most of these were magneto or common battery outfits hanging on the kitchen wall. In February 1950, REA approved its first telephone loan for the Florida Telephone Company in Florida, Alabama. By September, the Fredericksburg and Wilderness Telephone Company had put the first REA-financed equipment into use. It was also first to make a repayment two years later.

By July 1958, 439 REA telephone borrowers had 1,635 REA-financed dial exchanges in operation. Borrowers had reported that

LOANS APPROVED AND FUNDS ADVANCED TO REA TELEPHONE BORROWERS (FISCAL YEAR)

MILLIONS



more than 144,000 route miles of line were already built. More than 43,600 were built during the last fiscal year—a new high.

Loans approved by REA will provide new or improved service to more than a million rural telephone subscribers. As of July 31, 1958, 613 telephone systems had borrowed \$485.4 million. The 204 cooperatives borrowed \$207.2 million of this; the 409 commercial companies \$278.2 million.

The cooperatives planned to keep 6,700 miles of existing line and to add 139,400 miles of new line. The co-ops intended to use their loan funds to improve service for 182,000 existing subscribers and bring telephone service for the first time to 189,000 rural people.

Corresponding figures for the commercial companies show: 30,800 miles retained; 103,400 miles added; 384,000 existing subscribers with improved service; and

brand-new phone service for 275,000 rural subscribers.

Borrowers have been advanced loan funds at an increasing rate to improve and build their systems. More than \$317 million has already been put into use by 570 borrowers. Cooperatives have been advanced \$153.9 million; commercial companies \$163.4 million. Last year more than 82.8 million was advanced, a considerable increase over the \$23.8 million which borrowers used in 1953.

Construction itself has progressed at an even more rapid pace. A little more than 8,000 miles were finished in fiscal year 1953. Last year nearly 44,000 miles were built.

The loans are beginning to be paid off. (See back cover.) Already borrowers have repaid \$7.2 million on principal, as well as \$709,920 in advance payments. They have paid interest to the amount of \$5.5 million. Two com-

mercial companies and one cooperative have paid off their loans. Their total payments amounted to \$809,000. The active co-op list shows 148 borrowers have paid \$3.5 million on principal, and that they have paid \$3.1 million in interest. Thirty-two co-ops have made advance payments totaling \$414,500. Principal payments of the 182 commercial companies who have begun debt repayment total more than \$2.8 million. They have paid \$2.3 million in interest and 16 of them have made advance payments of \$295,000. At the end of the fiscal year, 12 co-ops and three commercial borrowers were overdue in payments more than 30 days, to the amount of \$363,000.

By the end of 1957, it was estimated that 55.3 percent of farms in the United States had telephones, a substantial increase over the 1950 figure of 38.2. A good share of these were still magneto or common battery.

At the current rate of building

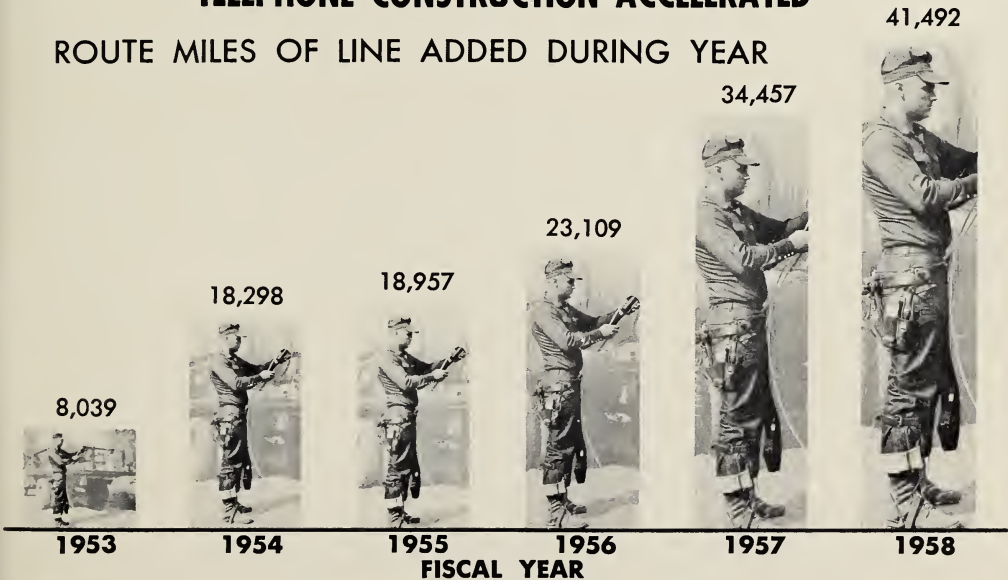
REA-financed rural phone systems, this figure will change rapidly. There is now accelerated demand for more and better telephone service in rural areas.

In line with this, borrowers are developing programs designed to improve management methods and to help rural people take the fullest advantage of available service. Several borrowers have recently conducted aggressive, continuing sales campaigns to sell more telephones. State associations have sponsored schools for telephone technicians and accountants, often in conjunction with established educational institutions. On-the-job training and correspondence courses are in wide use. REA technical experts have been busy conducting technical instruction for borrowers and state groups.

One authority has forecast that the entire country will have modern rural telephone service within the next 30 years.

TELEPHONE CONSTRUCTION ACCELERATED

ROUTE MILES OF LINE ADDED DURING YEAR



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GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300
(GPO)

PAYMENTS BY TELEPHONE BORROWERS TO GOVERNMENT INCREASE

Fiscal Year	Interest	Principal	Increase in Payments Ahead of Schedule	Total Payments
1953	\$ 15,828	\$ 46,607	—	\$ 62,435
1954	210,915	912,425	\$ 6,861	1,130,201
1955	488,284	456,600	6,895	951,779
1956	928,991	1,027,364	172,538	2,128,893
1957	1,553,131	1,804,911	223,652	3,581,694
1958	2,348,040	2,890,432	299,974	5,538,446
Total Interest Due and Paid \$5,545,439			Total Advance Payments \$709,920	
Total Principal Due and Paid \$7,153,593				

Cumulative as of 6/30/58